

### Abstract of the Disclosure

A process for recovering paraxylene from a substantially hydrocarbon feedstock. The recovery comprises cooling the hydrocarbon feedstock in at least one refrigerated crystallization stage that is indirectly refrigerated by evaporating at  
5 least a portion of a substantially liquid stream comprising ammonia. The crystallization stage may also be cooled by an ethylene refrigerant, which has been cooled by heat exchange with a substantially liquid stream comprising ammonia. The process further comprises a series of cooling substeps. This invention is also directed to an ammonia absorption refrigeration process powered by an enthalpy  
10 source from or near a paraxylene recovery unit.